

## ABSTRACT OF THE DISCLOSURE

A process for the selective removal of a  $\text{TiO}_2$ -containing substance from an article for cleaning applications is disclosed herein. In one embodiment, there is provided a process for removing a  $\text{TiO}_2$ -containing substance from an article comprising: providing the article having the  $\text{TiO}_2$ -containing substance deposited thereupon; reacting the substance with a reactive gas comprising at least one selected from a fluorine-containing cleaning agent, a chlorine-containing cleaning agent and mixtures thereof to form a volatile product; and removing the volatile product from the article to thereby remove the substance from the article.